

Title (en)

Refractory metal - titanium nitride conductive structures and processes for forming the same.

Title (de)

Leitfähige Strukturen aus hochtemperaturbeständigem Metall und Titannitrid und Verfahren zu deren Herstellung.

Title (fr)

Structures conductrices en métal réfractaire-nitruure de titane et leurs procédés de fabrication.

Publication

EP 0284794 A1 19881005 (EN)

Application

EP 88103057 A 19880301

Priority

US 3180887 A 19870330

Abstract (en)

The present invention provides a conductive structure for use in semiconductor devices. The structure can be used to interconnect the various diffusion regions or electrodes of devices formed on a processed semiconductor substrate to a layer of metal, to interconnect overlying layers of metal or to provide the gate electrode of an FET device formed on the surface of a semiconductor substrate. Various embodiments of the invention are described, but in broad form the active metallurgy of the present invention comprises a thin layer of titanium nitride and a thick layer of a refractory metal, e.g., tungsten or molybdenum, overlying the titanium nitride layer.

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H01L 21/285; **H01L 23/48**; **H01L 29/40**

IPC 8 full level

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H01L 2924/0002 + **H01L 2924/00**

Citation (search report)

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